

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1. - 4. (cancelled)

5. (previously presented) A parameter estimator comprising:

correlation logic for determining, using a dynamically variable integration time, a correlation function representing the correlation between a signal and one or more shifted versions of an identification code; and

analysis logic for analyzing the correlation function and estimating, responsive thereto, at least one parameter other than the identification code relating to the signal, wherein the parameter estimator is configured to determine an integration time from an analysis of a correlation function derived from the signal using a default integration time.

Claims 6. - 23. (cancelled)

24. (currently amended) A method of estimating one or more parameter(s) of a signal using a dynamically variable integration time comprising:

determining, using a first integration time, a first correlation function representing the correlation between a the signal and one or more shifted versions of an identification code;

attempting to estimate, responsive to the first correlation function, one or more parameter(s) relating to the signal; and

if the attempt is unsuccessful:

determining, using a second integration time which may differ from the first integration time, a second correlation function representing the correlation between the signal and one or more shifted versions of the identification code;

attempting to estimate, responsive to the second correlation function, the one or more parameter(s) relating to the signal; and

iterating until the one or more parameter(s) are estimated, or it is determined that the one or more parameter(s) cannot be estimated from the signal.

25. (previously presented) A method of estimating one or more parameter(s) relating to a signal using a dynamically variable integration time comprising:

determining, using a first integration time, a first correlation function representing the correlation between the signal and an identification code;

determining, responsive to the first correlation function, a second integration time which may differ from the first integration time;

determining, using the second integration time, a second correlation function representing the correlation between the signal and the identification code; and

attempting to estimate, responsive to the second correlation function, one or more parameter(s) relating to the signal.

26. (original) The method of claim 25 wherein the signal is a pilot signal.

27. (cancelled)

28. (original) The method of claim 25 wherein the second integration time is of shorter duration than the first.

29. (original) The method of claim 25 wherein the second integration time is of longer duration than the first.

30. (original) The method of claim 25 wherein the one or more parameter(s) include a time of arrival (TOA) parameter.

31. (original) The method of claim 30 wherein the one or more parameter(s) include root mean squared error (RMSE) for the TOA parameter.

32. (cancelled)

33. (original) The method of claim 25 further comprising iterating until the one or more parameter(s) are estimated, or it is determined that the one or more parameter(s) cannot be estimated from the signal.

Claims 34. - 35. (cancelled)

36. (previously presented) A method of estimating one or more parameter(s) relating to a signal using a dynamically variable integration time comprising:

- a step for determining, using a first integration time, a first correlation function representing the correlation between the signal and an identification code;

- a step for determining, responsive to the first correlation function, a second integration time which may differ from the first integration time; -

- a step for determining, using the second integration time, a second correlation function representing the correlation between the signal and the identification code; and

- a step for attempting to estimate, responsive to the second correlation function, one or more parameter(s) relating to the signal.

Claims 37. - 39. (cancelled)

40. (currently amended) A processor-readable medium ~~including encoded with~~ including encoded with processor-executable instructions ~~stored thereon~~ for, when executed by a processor, estimating one or more parameter(s) of a signal using a dynamically variable integration time, comprising:

- instructions for determining, using a first integration time, a first correlation function representing the correlation between a first signal and one or more shifted versions of a first identification code;

- instructions for estimating, responsive to the first correlation function, one or more parameter(s) relating to the first signal;

instructions for determining, using a second integration time which may differ from the first integration time, a second correlation function representing the correlation between a second signal and one or more shifted versions of a second identification code; and

instructions for estimating, responsive to the second correlation function, one or more parameter(s) relating to the second signal.

41. (currently amended) A processor-readable medium ~~including~~ encoded with processor-executable instructions ~~stored thereon~~ for, when executed by a processor, estimating one or more parameter(s) of a signal using a dynamically variable integration time, comprising:

instructions for determining, using a first integration time, a first correlation function representing the correlation between the signal and one or more shifted versions of an identification code;

instructions for attempting to estimate, responsive to the first correlation function, one or more parameter(s) relating to the signal; and

if the attempt is unsuccessful:

instructions for determining, using a second integration time which may differ from the first integration time, a second correlation function representing the correlation between the signal and one or more shifted versions of the identification code; and

instructions for attempting to estimate, responsive to the second correlation function, the one or more parameter(s) relating to the signal.

42. (currently amended) A processor-readable medium ~~including~~ encoded with processor-executable instructions ~~stored thereon~~ for, when executed by a processor, estimating one or more parameter(s) relating to a signal using a dynamically variable integration time, comprising:

instructions for determining, using a first integration time, a first correlation function representing the correlation between the signal and an identification code;

instructions for determining, responsive to the first correlation function, a second integration time which may differ from the first integration time;

instructions for determining, using the second integration time, a second correlation function representing the correlation between the signal and the identification code; and

instructions for attempting to estimate, responsive to the second correlation function, one or more parameter(s) relating to the signal.

43. (previously presented) A server including computer executable instructions stored thereon for, when executed by a computer, estimating one or more parameter(s) of a signal using a dynamically variable integration time, comprising:

instructions for determining, using a first integration time, a first correlation function representing the correlation between a first signal and one or more shifted versions of a first identification code;

instructions for estimating, responsive to the first correlation function, one or more parameter(s) relating to the first signal;

instructions for determining, using a second integration time which may differ from the first integration time, a second correlation function representing the correlation between a second signal and one or more shifted versions of a second identification code; and

instructions for estimating, responsive to the second correlation function, one or more parameter(s) relating to the second signal.

44. (previously presented) A server including computer executable instructions stored thereon for, when executed by a computer, estimating one or more parameter(s) of a signal using a dynamically variable integration time, comprising:

instructions for determining, using a first integration time, a first correlation function representing the correlation between the signal and one or more shifted versions of an identification code;

instructions for attempting to estimate, responsive to the first correlation function, one or more parameter(s) relating to the signal; and

if the attempt is unsuccessful:

instructions for determining, using a second integration time which may differ from the first integration time, a second correlation function representing the correlation between the signal and one or more shifted versions of the identification code; and

instructions for attempting to estimate, responsive to the second correlation function, the one or more parameter(s) relating to the signal.

45. (previously presented) A server including computer executable instructions stored thereon for, when executed by a computer, estimating one or more parameter(s) relating to a signal using a dynamically variable integration time, comprising:

instructions for determining, using a first integration time, a first correlation function representing the correlation between the signal and an identification code;

instructions for determining, responsive to the first correlation function, a second integration time which may differ from the first integration time;

instructions for determining, using the second integration time, a second correlation function representing the correlation between the signal and the identification code; and

instructions for attempting to estimate, responsive to the second correlation function, one or more parameter(s) relating to the signal.

46. (new) The parameter estimator of claim 5, wherein the correlation logic determines correlation values of the correlation function based on a coherent integration of the signal with the one or more shifted versions of the identification code.

47. (new) The parameter estimator of claim 5, wherein the correlation logic determines correlation values of the correlation function based on non-coherent sums of a plurality of coherent integrations of the signal with the one or more shifted versions of the identification code.

48. (new) The parameter estimator of claim 5, wherein the signal comprises a pilot signal.

49. (new) The parameter estimator of claim 5, wherein the at least one parameter comprises at least one of a time of arrival parameter or a root mean square error of the time of arrival parameter.

50. (new) The parameter estimator of claim 5, wherein the parameter estimator determines the integration time based on an energy of a strongest peak of the correlation function derived from the signal using the default integration time.

51. (new) The processor-readable medium of claim 41, wherein the signal comprises a pilot signal.

52. (new) The processor-readable medium of claim 41, wherein the second integration time is of shorter duration than the first integration time.

53. (new) The processor-readable medium of claim 41, wherein the second integration time is of longer duration than the first integration time.

54. (new) The processor-readable medium of claim 41, wherein the one or more parameter(s) include a time of arrival (TOA) parameter.

55. (new) The processor-readable medium of claim 54, wherein the one or more parameter(s) include root mean squared error (RMSE) for the TOA parameter.

56. (new) A parameter estimator comprising:
means for determining, using a first integration time, a first correlation function representing a correlation between a signal and one or more shifted versions of an identification code;

means for attempting to estimate, responsive to the first correlation function, at least one parameter relating to the signal;

means for determining, if the attempt is unsuccessful and using a second integration time, a second correlation function representing the correlation between the signal and one or more shifted versions of the identification code; and

means for attempting to estimate, responsive to the second correlation function, the at least one parameter relating to the signal.

57. (new) The parameter estimator of claim 56, wherein the signal comprises a pilot signal.

58. (new) The parameter estimator of claim 56, wherein the second integration time is of shorter duration than the first integration time.

59. (new) The parameter estimator of claim 56, wherein the second integration time is of longer duration than the first integration time.

60. (new) The parameter estimator of claim 56, wherein the at least one parameter includes a time of arrival (TOA) parameter.

61. (new) The parameter estimator of claim 60, wherein the at least one parameter includes a root mean squared error (RMSE) for the TOA parameter.